

March 5, 2003

Mr. Rob Hienrich
GKN Sinter Metals
P. O. Box 312
Salem, IN 47167

Re: 175-16756
Notice-only change to
MSOP 175-15094-00011

Dear Mr. Hienrich:

GKN Sinter Metals was issued a Minor Source Operating Permit No.: 175-15094-00011 on February 4, 2002 for an iron sintering plant. A letter requesting the Office of Air Quality for a notice-only change was received on February 3, 2003. The change is related to the addition of one (1) draw furnace for the annealing of metal parts, using natural gas at the rate of 0.5 mmBtu per hour. The potential to emit of all criteria pollutants is at exemption levels as defined in 326 IAC 2-1.1-3(d). The potential to emit of PM is less than 0.551 pounds per hour, and thus the draw furnace is exempt from the requirements of 326 IAC 6-3-2. Pursuant to the provisions of 326 IAC 2-6.1-6 the permit is hereby revised as follows (~~strikeout~~ to show deletions and **bold** to show additions):

(1) Section A.2 is modified as follows:

- (n) one (1) natural gas fired boiler, identified as 512-01, rated at 0.126 million Btu per hour heat input. This boiler was constructed in June, 1995.
- (o) **One (1) natural gas fired draw furnace, identified as 511-06, rated at 0.5 mmBtu per hour and 800 pounds of iron per hour.**

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this letter and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Madhurima Moulik, at (800) 451-6027, press 0 and ask for Madhurima Moulik or extension 3-0868, or dial (317) 233-0868.

Sincerely,
Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

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cc: File - Washington County
U.S. EPA, Region V
Washington County Health Department
Air Compliance Section Inspector - Ray Schick
Compliance Data Section - Karen Nowak
Administrative and Development
Technical Support and Modeling - Michele Boner

MINOR SOURCE OPERATING PERMIT OFFICE OF AIR QUALITY

**GKN Sinter Metals, Inc.
Becks Mill Road
Salem, IN 47167**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: 175-15094-00011	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: February 4, 2002 Expiration Date: February 4, 2007

1 st Notice-Only Change No.: 175-16756	Pages Modified: 5
Issued by: Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: March 5, 2003

- (j) Two (2) natural gas fired endothermic gas generators, identified as 507-108 and 507-109, each rated at 0.25 million Btu per hour heat input.
- (k) Two (2) natural gas fired endothermic gas generators, identified as 507-111 and 507-112, each rated at 0.25 million Btu per hour heat input.
- (l) One (1) natural gas fired endothermic gas generator, identified as 507-113, rated at 0.75 million Btu per hour heat input.
- (m) One (1) natural gas fired boiler, identified as 512-22-2, rated at 0.0382 million Btu per hour heat input. This boiler was constructed in 1971.
- (n) One (1) natural gas fired boiler, identified as 512-01, rated at 0.126 million Btu per hour heat input. This boiler was constructed in June, 1995.
- (o) One (1) natural gas fired draw furnace, identified as 511-06, rated at 0.5 mmBtu per hour and 800 pounds of iron per hour.

Appendix A: Emissions Calculations**Natural Gas Combustion Only****MM BTU/HR <100****Natural Gas fired Furnace****Company Name: GKN Sinter Metals, Inc.****Address City IN Zip: Becks Mill Road, Salem, IN 47167****CP: 175-16756****Plt ID: 175-00011****Reviewer: Madhurima D. Moulik****Date: Feb 2003**Heat Input Capacity
MMBtu/hrPotential Throughput
MMCF/yr

0.5

4.4

Pollutant						
Emission Factor in lb/MMCF	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr						
	0.0	0.0	0.0	0.2	0.0	0.2

*PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

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Note: PM emissions from the heat treatment operation is estimated to be less than 0.551 lb/hr. There is no emission factor for heat treatment.

Appendix A: Emissions Calculations**Natural Gas Combustion Only****MM BTU/HR <100****Natural Gas fired Furnace****HAPs Emissions****Company Name: GKN Sinter Metals, Inc.****Address City IN Zip: Becks Mill Road, Salem, IN 47167****CP: 175-16756****Plt ID: 175-00011****Reviewer: Madhurima D. Moulik****Date: Feb 2003****HAPs - Organics**

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	4.599E-06	2.628E-06	1.643E-04	3.942E-03	7.446E-06

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	1.095E-06	2.409E-06	3.066E-06	8.322E-07	4.599E-06

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.